



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/539,431

06/20/2005

Philippe Guillotel

PF030007

6805

24498

7590

01/21/2009

Robert D. Shedd

Thomson Licensing LLC

PO Box 5312

PRINCETON, NJ 08543-5312

EXAMINER

ASHRAF, WASEEM

ART UNIT

PAPER NUMBER

2455

MAIL DATE

DELIVERY MODE

01/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/539,431	Applicant(s) GUILLOTET ET AL.	
	Examiner WASEEM ASHRAF	Art Unit 2455	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is a responsive to the amendment filed on 10/23/2008.
2. Claims 1-12 are pending in this office action.
3. Claims 7, and 12 were amended.
4. Claims 1-12 are rejected.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, the phrase “several streams” is indefinite for failing to particularly point out and distinctly claim the subject matter. It is not clear to the examiner what applicant means by this phrase.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4 and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (US 2001/0004352 A1)

Watanabe teaches the invention as claimed including a data receiving terminal, if a received-data of a particular time section received from a data sending terminal does not satisfy a predetermined accumulation quality as the result of discrimination by a received-data quality discriminating section, an alternative-data sending requesting section requests a data sending terminal for alternative data. (See abstract)

Regarding claims 1, 10 and 12, Watanabe teaches a device, a process and a computer program product for the adjustment of the bit rate of a stream of contents as a function of processing capabilities of at least one receiver (Fig. 1 teaches receiving terminal 3), the contents being transmitted by a sender to the receiver via a network (Fig. 1 teaches network 4), according to a communication protocol providing for a return transmission of reception data of the contents by the receiver to the sender (Pg. 2, paragraph 0021 teaches RTCP protocol providing return transmission of reception data), the device comprising : **a module for inputting information relating to the capabilities** (Paragraph 0095-0097 teaches determining accumulation quality of the received data from data-quality-variance range; in other words the receiver selects which bit rate the receiver wants to receive the data that presents the best quality); **a module for estimating a required level for the bit rate at least as a function of the information** (Paragraph 0037 teaches a received-data quality discriminating section for discriminating if the data received satisfies a pre-determined accumulation quality; in other words the discrimination

Art Unit: 2455

modules (a module) estimates (1 quality over other is a range variance of bit rate, it is an estimate not an exact rate) a required level for the bit rate (different quality means receiving on different rate as taught by reference) as a function of the information (discriminates based on the predetermined rate information which is selected by the receiver)), **and a module for writing stream adjustment cues that is intended to write the adjustment cues for return transmission with the reception data to the sender** (Paragraph 0038 teaches an alternative-data sending requesting section that sends a request to sender for alternative data; in other words this modules writes the request for alternative data that needs to be sent on the predetermined quality), **the adjustment cues being capable of bringing about a modification of the bit rate in relation to the required level** (Paragraph 0043 teaches alternative-data sending section that sends the alternative data when requested by alternative requesting section of receiver; in other words when a receiver requests alternative data, the request is capable of bringing about a modification of the bit rate in relation to required level (predetermined quality)), **wherein the communication protocol providing for a return transmission to the sender of at least one parameter relating to conditions of communication of the contents** (Paragraph 0079 teaches sending terminal recognizing a status of traffic load of the network band to the receiving terminal, and making quality selection for sending the data; in other words the communication protocol (RTCP) provides to the sender one parameter relating to condition of communication of the contents (quality parameter)) **in the network between the sender and the receiver** (Fig. 1 teaches the data being sent between sender and receiver based on the selected quality parameter), **the writing module is intended to modify the parameter in such a way as to use it to transmit the adjustment cues** (Paragraph 0038 teaches alternative data requesting section that

Art Unit: 2455

sends a request for alternative data; in other words the quality parameter is modified to pre-determined quality parameter)

Regarding claim 2, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the communication protocol is the RTCP protocol** (Pg. 5, paragraph 0079 teaches using RTCP protocol)

Regarding claim 3, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the parameter of the protocol is intended to serve to calculate a round trip transmission delay between the sender and the receiver** (Pg. 2, Paragraph 0021 teaches measuring round trip delay time by using parameters SR/RR of RTCP protocol)

Regarding claim 4, Watanabe teaches the limitation as described in claim 3 above, and further discloses **wherein the parameter of the protocol comprises a delay introduced at the receiver between a moment of reception of the contents and a moment of sending of the reception data by the receiver** (Fig. 12 teaches sending RR message that includes delay introduced at receiving terminal between the reception of message 112 and sending of the message 113)

Regarding claim 6, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the writing module is capable of modifying the parameter by means of several successive variations of the parameter** (Fig. 5 teaches network interface

Art Unit: 2455

section 31 that sends the RR report that contains modified parameter. Depending on the network and device condition it will be varied to adjust to the required rate)

Regarding claim 7, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the estimating module is capable of determining a value to be attained for the bit rate of the stream of contents also as a function of a rate of sharing of the capabilities of the receiver between several streams** (Fig. 5 teaches section 35' that is capable of determining the required rate of the content based on the expected quality information)

Regarding claim 8, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein the input module and estimation module are designed so that the processing capabilities of the receiver comprise at least one criterion of the performance of the receiver chosen from among a data processing speed, a memory volume, an energy consumption and a presence of components dedicated to the processing of the contents** (Pg. 1, paragraph 16 teaches lowering sending rate; which reflects the performance capabilities of the receiving device)

Regarding claim 9, Watanabe teaches the limitation as described in claim 1 above, and further discloses **wherein it comprises a device for adjusting bit rate in accordance with claim 1** (Fig. 5 teaches receiving terminal 3)

Regarding claim 11, Watanabe teaches the limitation as described in claim 10 above, and further discloses **wherein the network is a point-to-point communication network and the stream of the contents is transmitted continuously** (Pg. 7, Paragraph 0112 teaches sending MPEG system stream in RTP)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 2455

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 2001/0004352 A1) in view of Teruhi et al. (US 7327676 B2).

Stein teaches the invention substantially as claimed, including a data receiving terminal, if a received-data of a particular time section received from a data sending terminal does not satisfy a predetermined accumulation quality as the result of discrimination by a received-data quality discriminating section, an alternative-data sending requesting section requests a data sending terminal for alternative data. (See abstract)

Regarding claim 5, Watanabe teaches all the limitations of claim 1 as discussed above, however, it fails to explicitly teach **wherein the parameter of the protocol comprises a contents loss rate**.

Teruhi from the same or similar field of endeavor teaches **wherein the parameter of the protocol comprises a contents loss rate** (Fig. 4 teaches format of receiver report that comprises the number of packets lost)

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use packet loss field of RTCP protocol to calculate content loss rate. One would be motivated to do so to obtain rout quality information. (See Col 6, lines 66-67)

Response to Arguments

13. Applicant's arguments and amendments filed on 10/23/2008 have been carefully considered but they are not deemed fully persuasive.

Argument A: Applicant argues; Watanabe neither discloses nor suggests the limitations of claim 1.

Response A: Examiner respectfully disagrees.

The claim mapping of the limitations of claim 1 has been disclosed in the prior art section of the office action above and each limitation is addressed below regarding the rejection using the Watanabe reference with reference to other arguments b-e.

Argument B: Applicant argues; Watanabe neither discloses nor suggests "a module for inputting information relating to the processing capabilities of the receiver" as recited in claim 1 of the present arrangement.

Response B: Examiner respectfully disagrees.

Art Unit: 2455

Paragraph 0095-0097 teaches determining accumulation quality of the received data from data-quality-variance range; in other words the receiver selects which bit rate the receiver wants to receive the data that presents the best quality. The processing capabilities listed in the specification can't be examined since they are not part of the claimed language. The processing capability of device is such a broad term that it can be interpreted from CPU resources to encoding rate of the device (any capability of device).

Argument C: Applicant argues; Watanabe neither discloses nor suggests "a module for estimating a required level for said bit rate at least as a function of said information."

Response C: Examiner respectfully disagrees.

Paragraph 0037 teaches a received-data quality discriminating section for discriminating if the data received satisfies a pre-determined accumulation quality; in other words the discrimination modules (a module) estimates (different qualities is a range variance of bit rate they are encoded in, it is an estimate not an exact rate) a required level for the bit rate (different quality means receiving on different rate as taught by reference) as a function of the information (discriminates based on the predetermined rate information which is selected by the receiver))

Argument D: Applicant argues; Watanabe neither discloses nor suggests "a module for writing stream adjustment cues that is intended to write said adjustment cues for return transmission with said reception data to said sender, said adjustment cues being capable of bringing about a modification of said bit rate in relation to said required level."

Response D: Examiner respectfully disagrees.

Art Unit: 2455

Paragraph 0038 teaches an alternative-data sending requesting section that sends a request to sender for alternative data; in other words this modules writes the request for alternative data that needs to be sent in order to receive the predetermined quality. Paragraph 0043 teaches alternative-data sending section that sends the alternative data when requested by alternative requesting section of receiver; in other words when a receiver requests alternative data, the request is capable of bringing about a modification of the bit rate in relation to required level (predetermined quality))

Argument E: Applicant argues; Watanabe does not disclose or suggest a means to modify one of the above mentioned parameters.

Response E: Examiner respectfully disagrees.

Paragraph 0038 teaches alternative data requesting section that sends a request for alternative data; in other words the quality parameter is modified to pre-determined quality parameter.

Argument F: Applicant argues; Teruhi neither discloses nor suggests that "the parameter of the protocol comprises a contents loss rate."

Response F: Examiner respectfully disagrees.

Col 3, lines 60-67, and Col 4 lines 1-7 teaches destination node obtaining packet loss ratio (content loss rate), and writing them as information indicating the route quality in a receiver report, and sends the receiver report to the source. Col 4, lines 53-67 further teaches that receiver report is RTCP-RR report (parameter of protocol).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WASEEM ASHRAF whose telephone number is (571)270-3948. The examiner can normally be reached on Monday through Friday / 7:30 A.M to 5:00 P.M EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2455

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WA

01/13/09

/saleh najjar/

Supervisory Patent Examiner, Art Unit 2455